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The Fluoridation Movement and Appleton

Senior Thesis

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Table of Contents

Abstract.....	3
Introduction.....	4
Fluoride: A Brief History.....	5
The Fluoride Debate in Appleton, Wisconsin.....	9
Myths: Fluoride as a Poison	10
A Russian Conspiracy.....	14
Hero to Zero.....	17
Facts: Outagamie Dental Health Report.....	19
For Pete’s Sake, Let’s Keep Our Fluoridated Water.....	22
Who Wins, and Why?.....	24
The Movement Today.....	29
Conclusion.....	32
Bibliography.....	34

Abstract

In Appleton, Wisconsin, in 1957 a battle raged over fluoridation in the water. Fluoride had been present in Appleton's water supply since 1950, when the city council voted to put it there. It came to a referendum in 1957, when local antifuoridationists called for a vote. The benefits, profluoridationists argued, were that it slowed dental decay. Opponents to fluoride, however, believed a multitude of things about fluoride. They believed it was harmful, that it would build up over time and create illnesses such as cancer. Antifuoridationists also argued that it was a poison; some political extremists even believed it to be a Communist plot to deaden American's minds and subject them to mind control. Less extreme opponents argued that it was mass medication, and an abuse of governmental power. The most common argument was that it had not yet been fully tested on adults, and therefore was not ready for public use. We will look at these sides of the opponent's arguments in Appleton, how they fit into national norms, how profluoridationists overcame their arguments and won the referendum, becoming the first city in the state of Wisconsin to keep fluoride in their water supply when it was already present.

Introduction

It was during World War II that the first instance of fluoride was consciously added to water. Since then, the battle of medical mystery and political farce versus reason and scientific fact has raged around fluoride debates in the country. At the head of the debate when it first began was Wisconsin. Wisconsin had the most cases of fluoridated water in the 50s than any other state. What began in Grand Rapids, Michigan in 1945 has yet to fade into political oblivion. In Chippewa Falls, Wisconsin, just like in cities all over the country, water is still not fluoridated although medical experts and dentists all over the United States endorse it. In 2004, and again in 2009, the issue was brought before the city council and denied.¹ But travel east about 200 miles on what is currently highway 29, and we find a very different story.

Appleton, Wisconsin was one of the very first cities to have fluoride in their water. The city council approved its addition to the water supply in 1950. In 1956, uproar from the community caused the issue to be brought to a referendum on the April 1957 ballot. What was the reasoning for the cry for its removal? Like other cities, the safety of the chemical came into question. Additionally, some believed it to be mass medication and the government did not have the authority to force citizens to medicate themselves. Others, still, believed that it was a communist plot. This latter theory seems the most ludicrous, but the common fear of the time was communist infiltration into the State Department. Leading the witch hunt against communism was Senator Joe McCarthy of Wisconsin, Appleton's fallen hero.

¹ Fluoride Action Network, "Chippewa Falls Rejects Fluoridation." <http://www.fluoridealert.org/> Accessed November 11, 2009.

Although Wisconsin had the highest number of cities with fluoridated water, the chemical was being voted against in high numbers throughout the state. If it was present, it was taken out of the water system, and if it was not there, the majority of cities turned the proposition down. It is here, however, that Appleton differed from the rest of the state. They were the first city to keep fluoride in the water when it was already present.² This seems odd, as their hometown hero Joe McCarthy lead the country against communism. But in 1957 when this came to a vote, Senator McCarthy had already been discredited, and perhaps they were all too ready to turn away from anything that reminded them of him. Ultimately, Appleton's fluoride movement did not stray much from the national norm. The ability of proponents to organize effectively and gain the support of the right local experts and media outlets, they were able to end the referendum in their favor, regardless of the tactics used by antifuoridationists that had success in other cities.

Fluoride: A Brief History

In January of 1945, the first implementation of fluoride came in Grand Rapids, Michigan. As R. Allan Freeze and Jay H. Lehr, authors of The Fluoride Wars: How a Modest Public Health Measure Became America's Longest-Running Political Melodrama, add

It seemed such a simple act at the time. A tap was turned, and water that had been chlorinated for many years without much fuss now carried a second chemical supplement to help keep us healthy. Soon, the taps would be turned in city after city across the nation. For most, it was another blessing bestowed on us by modern medical science. But for some, it was one chemical too many.³

Grand Rapids was pleased to be the first city to try out this historic medical breakthrough. Children's teeth had been inspected the years before in the local school districts, and would be inspected again after they had been subjected to the fluoridated water. But the citizens of Grand Rapids did not

² The Fluoridation Scrapbooks. *Appleton Post-Crescent*, 1957.

³ Freeze, Allan and Jay Lehr. *The Fluoride Wars: How a Modest Public Health Measure Became America's Longest-Running Political Melodrama*. (New Jersey: John Wiley & Sons INC, 2009), 1.

understand then that what seemed to them at the time like a miraculous discovery soon would become a very heated debate in cities around the country.⁴

The discovery of the benefits of fluoridated water is an interesting one. It began when visitors to Colorado noticed colors of a varying degree on citizens. Called the “Colorado Stain” people had teeth that were brown, yellow, blackened, and even chalky white. What is now known as mottled enamel, “Colorado Stain” was linked to excess fluoride in the water systems. Fred McKay, a new dentist in Colorado Springs, noticed this staining of his client’s teeth. As he kept records he noticed that citizens of the area had the highest percentage of staining on teeth. Initial interest in staining of teeth produced nothing. Six years later after a move to St. Louis and back, the doctor again became struck with the “Colorado Stain.”⁵

Diving deeper into the problem, McKay corresponded with Dr. Green Vardiman Black of Chicago, an expert on dental enamel. Intrigued, Dr. Black decided to come to Colorado Springs in July of the next year to investigate further. McKay and a colleague, Dr. Isaac Burton, ran examinations of the children in Colorado Springs and asked several questions, including where the children were born, when they had moved to Colorado Springs, and from where the family got their water supply. Overall, 2945 children were inspected and 87.5% of them had the mysterious “Colorado Stain.”⁶ When Dr. Black came in July, he repeated the process, and prepared his speech for the State Dental Association’s meeting in Denver. His reputation as a national leader in dental research assured him a large crowd. He believed that although the mottling did not increase decay of teeth, it was “unsightly... [and] finding the cause would prevent physical disfigurement.”⁷

⁴ Freeze and Lehr, *Fluoride Wars*, 3.

⁵ McNeil, Donald. *The Fight for Fluoridation*. (New York: Oxford University Press, 1957), 4

⁶ McNeil, *Fight for Fluoridation*, 5.

⁷ McNeil, *Fight for Fluoridation*, 7.

Together, Black and McKay produced a series of five papers in the journal *Dental Cosmos*. Coupled with Black's "reputation and colorful writing style" the two were able to intrigue the dental community. Soon reports of the discoloration of teeth were coming in from all over the country.⁸

The investigation took over McKay's life, as he studied it well into the 1920s. By 1925, he was certain that the problem came from the water supplies but could find no support from the dental community, as there was no technology that could prove this yet. He did however find a way to convince an entire community, Oakley, Idaho, to switch over its water supply in order to stop the stain. In 1923, a survey found that "every child who had been raised on city water since 1908 faced the world with unattractive brown stained teeth." By 1925 Oakley had changed over their water supply.⁹ In 1932, McKay was able to prove his hypothesis by examining children in Oakley who were born after the water supply was switched, finding them to have no discoloration.

While McKay was focused on the mystery of the discoloration, others around the country were fascinated that those with mottled teeth had a lesser percentage of decay than those without mottled teeth. By 1923, J. F. McClendon from the University of Minnesota claimed that "sound teeth contained more fluorine than unsound teeth." A prominent nutritionist E. V. McCollum observed that there "was an abnormal color to teeth of rats when they added increased amounts of fluorides to the diet of animals."¹⁰ It seemed then that the dental community was slowly but surely coming to the conclusion that fluorides at high rates caused the mottling of teeth, but also stunted the decaying of teeth. By 1936, Dr. H. Trendley Dean, who had studied the before mentioned works, had conducted his own research. He concluded that any fluorides in the water above 1 part per million (ppm) resulted in mottled teeth. At 1ppm, only ten percent of the population had mottling and only

⁸ Freeze and Lehr, *Fluoride Wars*, 95.

⁹ McNeil, *Fight for Fluoridation*, 24.

¹⁰ McNeil, *Fight for Fluoridation*, 30.

very mildly. It was then found that Colorado Springs had a fluoride concentration in its water of 2.5 ppm, a rate at which 80 percent had mottling, and a quarter of those people had the most severe cases of mottling.¹¹ Later, Harold Hodge would mirror these findings and support Dean's research that 1 ppm was the safest and most effective concentration to halt tooth decay.¹²

Eventually the willing addition of fluoride to the water supplies would occur. As previously stated, it occurred in 1945 in Grand Rapids, Michigan. This seemed to be an experiment of some sort, and the public realized it. If Grand Rapids was the experiment, Muskegon, Michigan was its control. It remained unfluoridated in order to compare the results. Another control, Aurora, Illinois, was used as it had natural fluorides in its water. The purpose of this control was to compare natural fluorides versus added fluorides. Later that year a similar thing happened in New York. Newburgh, New York was fluoridated while its control was Kingston, New York. What was initially meant to be a ten to fifteen year study quickly turned into a race to get water fluoridated.¹³

It was here that profluoridationists in Wisconsin took charge. They were impressed with the rapid decline in decay of teeth after only a few years of the trials. Officially it was Gerald J. Cox, a biochemist from the Dental School at the University of Pittsburgh who was the first to recommend in writing that fluoride be put in water, and he is the one who is given credit (and blame) for recommending fluoride. But Wisconsin dentist John Frisch and dental administrator Francis Bull took control of the debate and lobbied to implement the new system. Dr. Dean, who had recently discovered the link of fluoride to tooth decay, was against this, wanting to wait for the trial to be finished and full results to be published. But Frisch and Bull were impatient. They quickly had the

¹¹ McNeil, *Fight for Fluoridation*, 48.

¹² Freeze and Lehr, *Fluoride Wars*, 105

¹³ Martin, Brian. *Scientific Knowledge in Controversy: The Social Dynamics of the Fluoridation Debate* (Albany: State of New York Press, 1991), 4.

endorsement of the United States Public Health Service (USPHS), disregarding Dean's concerns. Not long after, the American Dental Association (ADA) and the American Medical Association (AMA) joined the USPHS in supporting the fluoridation of water supplies. These institutions do not have the authority to enforce such a change in drinking water, this can only happen at the local level. As Brian Martin, author of *Scientific Knowledge in Controversy: The Social Dynamics of the Fluoridation Debate* agrees, "The USPHS endorsement did not force any community to fluoridate, but it did prove vital authoritative backing for local individuals and groups that pushed for it."¹⁴ Without this endorsement, the fluoridation of water supplies and the drastic reduction in tooth decay would have not been possible.

The Fluoridation Debate in Appleton, WI

Former hometown hero Joe McCarthy had once rallied against Communists and Appleton stood behind him. In 1954, McCarthy went too far when he accused President Eisenhower of being too soft on the Red Chinese. With this personal attack on Ike, Wisconsin finally turned their back on McCarthy.¹⁵ He was once a source of pride for Appleton and now he became a source of shame for the state that once loved him. Those who once voted him into office chanted "Joe must go!" and a petition for his removal from office was circulated.¹⁶ While it was ultimately unsuccessful, McCarthy undoubtedly felt the relationship with his home state sliding. Censured by the Senate in 1954 but McCarthy did not stop his campaign against communists. However he was ignored almost

¹⁴ Martin, *Scientific Knowledge in Controversy*, 4.

¹⁵ O'Brien, Michael. *McCarthy and McCarthyism in Wisconsin* (Columbia: University of Missouri Press, 1980), 174.

¹⁶ Gore, Leroy. *Joe Must Go* (New York: Julian Messner INC, 1954), 21.

completely by the media, including in his home state of Wisconsin and Appleton, who had once loved him.¹⁷

Our story takes place 12 years after the first implementation of fluoride in 1945. In the '50s, most cities in Wisconsin had some sort of referendum on fluoridation. Appleton, home of Senator McCarthy, was no different. On April 2nd, 1957, one month to the day before his death Appleton showed just how free they were of McCarthy by keeping fluoride in their water. It had been implemented by the city council in November of 1950, and had caused no shortage of uproar from antifluoridationists.¹⁸ In September of 1945, Will Eastman headed up the Appleton Antifluoridation Committee. In response to this committee, another was formed in its opposition. *The Committee for the Children: Appleton Association for Child Health Protection* was formed. Its main goal was to prevent the antifluoridationists from succeeding in their mission of removing fluoride from water supplies. However, the antifluoridationists committee in Appleton was successful in bringing forth a petition to remove fluoride from water. On the petition were over 2,800 names. The city council could either order the immediate removal of fluoride from the city's water supplies, or they could bring it to a vote on the spring ballot. Their decision was to bring forth a referendum on whether or not to keep fluoride in the water supplies.¹⁹

Myths: Fluoride as a Poison

In most cases, all antifluoridationists had to do against a weakly organized proponent movement was create doubt in the voters. Most voters would side with caution, accepting dental decay over the more serious side effects of fluoride that opponents claimed. There was no proof

¹⁷ Morgan, Ted. *Reds: McCarthyism in Twentieth Century America* (New York: Random House, 2004), 497.

¹⁸ Community Health and Prevention, *Outagamie Dental Health Report*, 1954.

¹⁹ Fluoridation Scrapbooks, *Appleton Post-Crescent*, 1957.

that it was a poison, or that it caused cancer, yet proponents had a hard time refuting it. In large enough doses, there was poisoning, illness, and mottled enamel, as we saw when McKay first set out on his mission to solve the “Colorado Stain.” Yet mottling only occurred at severe rates when water contained 2.5ppm of fluoride, much more than the 1ppm that was suggested by dentists and medical experts.²⁰ It is also true that fluorides in high enough doses did cause fluoride poisoning. But in order for a water supply that contained 1ppm to poison a person, they would have to drink approximately two and a half bathtubs of fluoridated water daily to produce even the slightest of side effects.²¹ J.B. Bruce, a self proclaimed medical expert, believed that fluoride also decreased vitamin absorption, caused a deficiency of hormones in the thyroid, and produced hydrofluoric acid which the stomach could not defend itself against. Additionally, he believed that by drinking fluoridated water, a woman would pass the chemical on to their fetus, producing what he referred to as a “dwarfed idiot.” Bruce also argued that fluoride caused cancer in high rates.²²

The claim that fluoride is a slow poison, one that would cause cancer eventually, is one that had no evidence in the ‘50s. There was no proof of this concept, except linking states with high cancer rates and a high level of fluoride. Wisconsin was one of those cases. Bruce claimed that water that contained fluoride was almost certainly a cancer causing agent. He said Wisconsin “has the highest cancer death rates of all the states. Wisconsin has the largest number of towns and communities that have adopted artificial water fluoridation.”²³ If this method of linking cancer to fluoride was used, no other criteria were looked into, providing alternate explanations.

²⁰ McNeil, *Fight for Fluoridation*, 24.

²¹ The Fluoride Scrapbooks, *Appleton Scrapbook: Proponent’s Brochure*, 1957.

²² Community Health and Prevention, *Antifluoridationists Newsletters*, 1960.

²³ Community Health and Prevention, *Antifluoridationists Newsletters*, 1960.

In Exner and Waldbotts book, The American Fluoridation Experiment, which was released the same year that Appleton held their referendum, they admit that there is no proof either way to whether or not fluorides cause cancer. Additionally, they call out proponents of fluoridation for “harp[ing] constantly on the theme that the *crack-pot* opponents even claim[ed] that fluoride causes cancer.” Their sarcasm admits their skepticism of fluoride, and the fact that proponents should not dismiss this claim so quickly. The authors do add that the question of whether or not fluoride caused cancer was included in the original fluoride study by the USPHS, and should not have been added until a definitive answer was given.²⁴ If this was the case, there would still be no fluoridated water. As is the case with any subject that is controversial, there are a multitude of studies available, some (released by proponents) claim that fluoride does not cause cancer, and others (mostly done by opponents) argue that there is an elevated risk of cancer if a person is subjected to fluoridated water.

Antifluoridationists also made the claim that fluoride was for profit, not for the benefit of communities. It is no secret that Gerald Cox, the first man to suggest fluoride be placed in water, was widely disliked among fluoride opponents. Many claimed that he was doing it for a profit for the Mellon Institute. Cox claimed that his “primary affiliation...[was] the School of Dentistry at the University of Pittsburgh.”²⁵ Portrayed as a member of the Mellon Institute, he could be subjected to accusations of biased research, but proponents portrayed him as a staff member at University of Pittsburgh. Doing so, he was required to produce unbiased field work, including his studies of fluoridation. A simple manipulation made his work seem like it was for profit. Christopher Bryson, author of The Fluoride Deception believes that, “Fluoride science is corporate science. Fluoride

²⁴ Exner, F.B. and G.L. Waldbott with J. Rorty (ed.) *The American Fluoridation Experiment* (New York: The Devin, Adair CO, 1957), 71.

²⁵ Freeze and Lehr, *Fluoride wars*, 155.

science is DDT²⁶ science. It's asbestos science. It's tobacco science."²⁷ By comparing fluoride to these obviously harmful things that corporations benefit off of, he is stating that Cox knew the harmful side effects of fluoride, and suggested its addition into community water supplies for his own, and his corporations, monetary benefit.

It was difficult for proponents of fluoride to refute the claims made by antifluoridationists. Opponents only had to create doubt while proponents had to assure safety of fluoridation. To do this, they pointed out that fluoride was only one drop in every 13 and a half gallons of water. In the profluoride brochures in Appleton, they made this very clear in attempts to convince citizens that fluoride was safe for use. They also included several colorful quotes, which seems to be an attempt to poke fun at opponents claim that fluoride was a poison. One such quote read, "It would take 40 tons of fluoride to poison the water of Rochester, New York...It would take 50 box car loads to poison Boston and 108 carloads to do the same in New York." A chemist, who was uncomfortable submitting his name, stated, "Why anyone should try to poison a water supply with tons and tons of expensive fluoride, when an ounce or two of botulinum²⁸ toxin would do the trick better, beats me."²⁹

²⁶ DDT is a pesticide that has been linked to low sperm counts and damage to male reproductive systems. The study was conducted in South Africa, where DDT was used in anti-malaria medication. Additionally, DDT has been found to be extremely toxic to fish, and many insects have built up immunity towards it. Continual ingestion of DDT causes back up in a human or animal's system, which is probable because it builds up in natural water supplies, resulting in a ban of the substance in the United States in 1973.

²⁷ Info Wars, "The Fluoride Deception-An Interview with Chris Bryson"
http://infowars.com/articles/science/fluoride_interview_chris_bryson.htm Accessed November 30, 2009.

²⁸ Botulinum Toxin is more commonly known as Botox. Ingested, it is considered to be the most toxic substance known to mankind.

²⁹ Fluoride Scrapbooks, *Proponent Newsletter*, 1957.

In addition proponents received approval from local dentists and medical experts, people that local citizens knew and trusted. A local ad, run on March 11, less than a month before the referendum, read: “Who will you believe? Your own doctor...your own dentist...all recognized public health authorities... Or---?”³⁰ It was accompanied with hundreds of signatures from local doctors and dentists. No doubt every citizen in Appleton recognized at least one name on the list, probably having trusted these opinions in the past. These tactics were to prove that fluoride was safe. To proponents, citizens had trusted their expertise and advice in the past; it only made sense that they continued to trust their opinions about fluoride by voting to keep fluorides in the water supply.

A Russian Conspiracy

Although not the main tool of antifuoridationists, accusing it of being the work of the Soviets caused a shiver of silent fear through citizens. It did not help that the first implementation of fluoride came in Grand Rapids, Michigan in 1945. This is the year that some historians place the beginning of McCarthyism and the Cold War. Americans saw what the Soviets could do in times of war. They had millions more casualties than anyone else in the war. It seemed almost as if their resources were endless. In 1945 most Americans had no doubt that if the Soviets wanted the United States, they would have her.

Popular fiction of the time did not disregard this seemingly outrageous accusation. In the 1964 movie, “Dr. Strangelove” an entire nuclear war is started over the suspected plot. General Jack Ripper orders his B52 bombers to deploy their nuclear weapons when he “can no longer sit back and allow communist infiltration, communist indoctrinization, communist subversion, and the international communist conspiracy to sap and impurify all of our precious bodily fluids.” He is of

³⁰ Fluoridation Scrapbooks, *Appleton Post-Crescent*, 1957.

course referring to the fluoridation of water, but he had not yet told that to anyone else at the time of the attack. The film works in the fact that fluoridation goes as an unnoticed communist plot, no one but General Ripper has any idea of the communist attack on the United States. Captain Mandrake even points out how it would be impossible for there to be a Soviet attack, as the radios were all still playing music. Surely if there was an attack on the United States, the radios would not have still been playing music.³¹

Later in the film when the General explains it more to Mandrake, he spoke of how it was obvious that the Soviets put this in the water to poison American citizens. "Have you ever seen a commie drink a glass of water?" he asked. When Mandrake replied that he had not, the General continued, "Vodka. That's what they drink, isn't it? Never water? ... On no account will a commie ever drink water, without good reason?" He went on to explain they do not drink water because they know of the plot against American citizens. He explained that "fluoridation is the most monstrously conceived and dangerous communist plot we have ever had to face." The fluoride, he believed, affected American's "precious bodily fluids" and with such a poison in their veins, they were subjected to weakness and exhaustion.³²

What appears as a ridiculous fear for citizens of today's world was a common and widespread fear in the 1950s. While only a few were willing to speak up about this fear that fluoride was a mind control device in the '50s, with the propaganda and fear spreading far and wide, these whispers were deeply rooted concerns. Today of course, this idea is ludicrous. From the view in post World War II America, this theory seemed ridiculous to much less a portion of citizens than it would today, although perhaps they believed it but were unwilling to admit to their worries.

³¹ *Dr. Strangelove or: How I Stopped Worrying and Learned to Love the Bomb*. Director Stanley Kubrick. 93 Minutes. 1964, reproduced in 2004. DVD.

³² *Dr. Strangelove*, Stanley Kubrick.

In some of the literature spread throughout Appleton during the campaign prior to the referendum, this conspiracy is eluded to. One mass produced article exclaimed, “fluoridation could play into the hands of our enemies...with fluoridation machines at the reservoirs, the population in important centers could be wiped out... THINK THIS OVER. LET’S KEEP [OUR] WATER PURE AND SAFE.” This is a clear example of the idea that any enemy, but particularly Russians, could easily poison the people of the United States. It may not have been through the use of fluoride, but they could have easily done it. With this fear, some probably asked themselves “Why couldn’t it be fluoride?” With the ability for someone to easily get to the water supply, and with the fear of espionage within the government, the idea that fluoride could be a poison was all too real.³³

Another person in the same article agreed with the dangers that the Russians could be poisoning the water supplies. But they took it one step farther, and played into the mind-control propaganda spreading at the time. He said fluoride “is pictured as being good for little children’s teeth, but I know it to be a secret Russian revolutionary technique to deaden our minds, slow our reflexes and gradually kill our will to resist aggression.” It was beliefs like this man, and the spread of this type of propaganda that inserted the fear into people. While the hype of McCarthyism was idling in the late 1950s, there were still those who were scared that their neighbor was their enemy that their local and state officials were Russian spies, and that nuclear war was just around the corner.³⁴

In Appleton, it is difficult to figure out where this source of propaganda was coming from. It is clear that these types of antifuoridationist tools were not used, at least locally and publically. Where there are at least some mention of Russian conspiracy in most cities, usually via letters to the editor,

³³ Fluoridation Scrapbooks, *Antifuoridationists Newsletter*, 1957.

³⁴ Fluoridation Scrapbooks, *Antifuoridationists Newsletter*, 1957.

there is none in Appleton. The only elusion to the Soviets being part of a national fluoride plot is in material that is shuttled from outside the city. The collections of letters to the editor are usually for the fluoridation of water, with a random spattering of antifuoridationists throwing their opinion into the mix. But not one of these letters taken from the *Appleton Post-Crescent* mentions one word about Russians, mind-control or conspiracy. But it can be deduced that there was this talk going around at least by word of mouth. Many people eluded in their letters to the “whispers” and “rumors” going around about fluoridation. Many try to disprove the rumors and whispers by providing facts and statistics. But not once were these things mentioned. It almost seems as no one wanted to be the first to admit that McCarthy’s tactics were still in play, especially in the town that once held him in such high esteem.

Hero to Zero

Additionally, Appleton had a unique and special tie to Senator Joe McCarthy. While McCarthy was born and raised in nearby Menasha, he attended high school in Appleton, and the entire area is interconnected to the point where McCarthy is seen as being from Appleton. Therefore, McCarthy’s triumphs and failures are radiated through Appleton. At the beginning of his career, the *Appleton Post-Crescent* boasted of his war record,³⁵ portraying him as a man who stood for his beliefs and his country, supposedly enlisting with no promise of pay by the military.³⁶ In 1944 when he announced his candidacy for Senate from overseas, the *Post-Crescent* stated he was “impregnated with mother

³⁵ McCarthy was stationed in the Pacific Theater after enlisting in 1942. He embellished his military experience, and claimed 14, 17 and finally 32 as the number of combat situations he was in throughout his career.

³⁶ O’Brien, *McCarthy and McCarthyism in Wisconsin*, 44.

wit and quick, penetrating ability gloved in prudence.”³⁷ It was obvious that they were very proud of their good-old-boy when he first started out.

As public opinion began to slide of McCarthy, so did the *Post-Crescent's*. In 1955, his hometown newspaper “objected to his careless propensity to level the charge of treason against people with whom he disagreed and disapproved of his ‘heavy-handed humor’ and ‘lack of dignity.’”³⁸ The paper also questioned his methods earlier, before his official censure that occurred in 1954.³⁹ In 1952, they said his tactics were “gutter-like approaches” and believed he had reached a new low, and was rapidly losing credibility and dignity.⁴⁰ In 1954, the same year as the famous Army-McCarthy hearings and his censure, the cry for Senator McCarthy’s removal from office was echoed through Wisconsin, and chants of “Joe Must Go” were heard around the nation. A book of the same name was published written by Leroy Gore of Sauk City, Wisconsin. He calls upon the people of America to “destroy not only mccarthyism but every other Evil Ism that feeds upon bigotry and hate...they can destroy the Evil Isms through this generation and a generation to come.”⁴¹ Here Gore is talking about racism, “Hitlerism,” Communism, and the Ku Klux Klan.

It is evident that through the “Joe Must Go” movement and the declining opinions in the Appleton *Post-Crescent* that within McCarthy’s state and even his hometown citizens were ready to move on. Public opinion had slid to detrimental levels. There was a definite correlation between McCarthy and those that supported fluoride. A study done in 1953 prior to a referendum on fluoride in Northampton, Massachusetts, showed that those that supported fluoride with a college education believed 69% of the time that McCarthy had done more harm than good. Among those without a

³⁷ Quoted in O’Brien, *McCarthy and McCarthyism in Wisconsin*, 50.

³⁸ O’Brien, *McCarthy and McCarthyism in Wisconsin*, 206.

³⁹ Morgan, *Reds*, 377.

⁴⁰ O’Brien, *McCarthy and McCarthyism in Wisconsin*, 250.

⁴¹ Gore, *Joe Must Go*, 173.

college education, twice as many believed McCarthy had done more harm than good.⁴² In Appleton, it is probable that the same kind of statistics would have occurred if a study had been done, as support of McCarthy and antifuoridation were both part of the same ideology.

It is possible that because the two were linked, it would have been difficult for a citizen who had once held McCarthy in high esteem to vote against fluoridation. By doing so, they were proving they were free of Senator McCarthy and his questionable tactics. Earlier, when a citizen voted for McCarthy they were inadvertently voting for political extremism. Most likely, they were simply voting for their party's candidate, but because it was McCarthy it was considered extreme. Appleton citizens, along with the rest of Wisconsin, accidentally supported McCarthy's viewpoints and tactics, when really he was just the Republican candidate in a Republican state. Especially in Appleton, where McCarthy was from, providing freedom from the viewpoint that they were a town that bred and supported political extremism was probably a very powerful reason to keep fluoride in their water.

Facts: Outagamie Dental Health Report

Many antifuoridationists argued that there was not satisfactory studies done proving that fluoride in water supplies actually decreased dental decay. The fact is though that there were studies available. In Outagamie County, the county in which Appleton resides, a Dental Health Report was released in 1954. This was three years before the Appleton referendum. However, it was not the kind of study that the opponents called for in order to prove effectiveness of fluoride. It did however show a decrease in dental caries in children. The objectives of the health report were as follows:

⁴² Crain, Robert, Elihu Katz, and Donald Rosenthal. Politics of Community Politics: The Fluoridation Decision (New York: The Bobbs-Merril Company INC, 1969), 47.

1. To provide a sound basis for planning a dental health program designed to meet the specific needs of the county and to supply accurate, understandable information to the people in the community so they will support a good continuing program.
2. To provide baseline data from time to time.
3. To find what age groups have the most decay, what proportions of cavities have been filled, how prevalent are other dental ailments, etc.
4. To learn what obstacles are making the achievement of good dental health difficult: E.g., the sale of sweets in school, oral hygiene, poor food habits, inadequate dental care, inadequate amounts of fluorine in public water supplies.
5. To discover what resources there are in the community to help meet the dental needs being defined by the survey.⁴³

In the report, they took a sample from both the fluoride areas and the non-fluoride areas. The fluoride sample used was Appleton elementary schools. The following chart was taken from the dental health report.

Fluoride Area

Grade	No. Examined	No. Needing Dental Care	Percentage Needing Dental Care	% FNM*	Def**	DMF***
Kindergarten	310	185	60%	29%	2.5	-
4 th Grade	191	48	25%	45%	-	1.1
8 th Grade	209	106	50%	47%	-	3.1

Non-Fluoride Area

Kindergarten	183	99	54%	33%	4	-
4 th Grade	287	206	71%	61%	-	3.1
8 th Grade	262	220	84%	42%	-	7.0

*%FNM refers to the percentage of filling needs met; that is, the percentage of carious teeth that have been restored to normal function.

**def refers to the caries attack rate in primary teeth; that is the average number of decayed, extracted and filled teeth per child. Determined on kindergarten age only.

***DMF refers to the caries attack rate in permanent teeth; that is, the average number of decayed, missing and filled permanent teeth per child.⁴⁴

⁴³ Community Health and Prevention, *Outagamie Health Report*, 1954.

As seen in the table, the areas with fluoride in Outagamie County not only had less children that needed dental care, but dental care for these children was more readily available. Perhaps it is not because dentists were more concentrated in these areas; it is more likely that they were in less demand. Therefore those that needed dental care were able to receive it. With the exception of kindergarten, each area has a significant percentage of fewer children that need dental care. This pointed out that fluoride in these areas was working as they planned it to when they put it in the water. The report goes on to recommend to Hortonville, Seymore, Nichols and Black Creek (those in Outagamie County without fluoride) to:

- a. Review the policies on fluoridation of public water supplies as formulated by the Wisconsin State Dental Society and the American Dental Association.
- b. Consider seriously the economic advantage of spending about 10 cents per capita per year to save several dollars worth of dental care for each child.

Reports from each county were conducted, each with similar outcomes. In each case, the fluoridation of water helped improve the overall dental health of children.⁴⁵

In addition, the Wisconsin Fluorine Study Committee with the help of Frank Bull and John Frisch released studies in order to gain the support of the USPHS. It is certain that the USPHS would not have issued its support if they believed sufficient studies had not been conducted. Dean, the man that helped McKay discover the cause of the “Colorado Stain,” was against the USPHS issuing its support in 1950 like Frisch and Bull wanted. He believed it was too soon after artificial fluoride had been added to Grand Rapids to be sure.⁴⁶ However, they believed that Dean and McKay’s initial studies were proof enough of fluoride’s effectiveness. The studies released in the early 1950s all showed positive effects, although it was after only six years of fluoridating Grand Rapid’s water

⁴⁴ Community Health and Prevention, *Outagamie Health Report*, 1954.

⁴⁵ Community Health and Prevention, *Outagamie Health Report*, 1954.

⁴⁶ McNeil, *Fight for Fluoridation*, 27.

instead of the recommended ten to fifteen. Muskegon, MI, the control in the experiment who did not have fluoridated water initially, did not want to miss out on the health benefits, and fluoridated their water in the early 50s. This only fueled the antifluoridationist's argument, as the complete study was never finished.⁴⁷

For Pete's Sake Let's Keep Our Fluoridated Water

One major argument the proponents of fluoridation used was how it would help the children, which was common as the purpose of fluoride was for the benefit of children. This is the area that Appleton profluoridationists used most effectively in their campaign. *The Committee for the Children* campaign was far and wide, reaching every corner of Appleton. By appealing to parents, teachers, and kind-hearted citizens they utilized these young ones. They distributed 75,000 pieces of material, usually door to door throughout Appleton in their campaign. Neighborhood Action Committees were formed to hand out brochures, buttons, newsletters, and enlist the help of fellow citizens. They held a phone survey, which showed Appleton citizens 60-40 in favor in keeping their water fluoridated. Their slogan was "FOR PETE'S SAKE let's keep our fluoridated water." Every time it appeared in a newsletter or the paper it was accompanied by a drawing of a little boy named Pete.⁴⁸

Enlisted in the campaign was the *Appleton Post-Crescent*, who released 15 articles in favor of fluoridation. The only article they ever released that may have seemed negative towards the program was an overview of a meeting held by the Appleton Anti-Fluoridation Committee. Because of this the newspaper and the editor came under attack from opponents. They covered the story in their own newspaper, no doubt a way to defend themselves. The editor wrote:

⁴⁷ Freeze and Lehr, *Fluoride Wars*, 115.

⁴⁸ Fluoridation Scrapbooks, *Committee for the Children Newsletters & Appleton Post-Crescent*, 1957.

The *Post-Crescent* never makes arguments with anybody regarding the way news is to be covered. We have only one policy on news coverage---we tell the facts no matter which side they fall on. That is what we are doing in covering the fluoridation issue. That is what we will continue to do.

Printed earlier in the paper the editor made it very clear he would only publish editorials that held facts that could be proven with citations. This obviously cut out a great majority of opponent's arguments, including that fluoride was a Russian conspiracy, a poison, or caused cancer.⁴⁹

This committee had mass support throughout the community. They even state that the success of this program would only succeed with the support of the neighborhood action. Advertising and publicity were obviously a huge part of the success of the committee, "but nothing will do the job the way effective neighborhood action will." So the committee set up all sorts of positions within the organization. Most important were those who went door to door. Each person was given a block in the city to communicate the facts about fluoridation and the purpose of the committee. They were also given the duty of recruiting more people for the cause. It was easy for people to become involved in the organization; their mission statement was clear and persuasive. It was as follows:

Something ugly is happening in Appleton right now. Your help is badly needed to put an end to it—to see that no lasting harm is done. The city's six-year old water fluoridation program—which has been proven in more than 1500 different communities...which has already accomplished a 41% reduction in our children's tooth decay... which has the unqualified endorsement of Physicians and Dentists in the city, and of an impressive list of local, state, and national professional groups...which is completely safe and attractively economical—this program has been challenged by a small group of men, completely devoid of scientific competence to deal with the subject. And they are well on their way to destroying this remarkably beneficial program.⁵⁰

⁴⁹ Fluoridation Scrapbooks, *Appleton Post-Crescent*, 1957.

⁵⁰ Fluoridation Scrapbooks, *Committee for the Children Newsletter*, 1957.

Additionally, the statement went on to say they would “fight rumors, whispering campaigns, and innuendos—with facts.” These were the same whispers and rumors that no one seems to be able to clarify, probably because of the uproar it would cause to accuse someone of these thoughts. Their tactics were clear and effective, notice how they underlined the most exceptional parts of what fluoridation caused. It also does seem to make their opponents seem quite ridiculous for opposing such a program, which is probably the point of the statement.

However, there were those who were against the use of fluoridation because of the future of these same children. While it may have reduced dental caries, they were uncertain of the long-term effects. Two M.D.s, F.B. Exner and G.L. Waldbott wrote in their 1957 book, The American Fluoridation Experiment that “fluorine poisoning approaching epidemic proportions was first reported from Saginaw, Michigan, which adopted fluoridation in 1950 and discontinued the program in 1954.” They go on to list several other cities that have reported poisoning from fluoride, and state that no adequate studies of both children and adults have been reported. Furthermore, they argue that by the time of their book, 1957, the program is still experimental but the Public Health Service denies any adverse affects. Because of this denial, they argue that “local and state health officials refused to take these reports [of fluoride poisoning] seriously.”⁵¹ Additionally, no long term studies were conducted by this point, which is also the year that Appleton held their referendum. They believe there could not be confidence in this health measure until the effects on adults and children who had prolonged exposure could be studied.

Who Wins and Why

So why are some fluoridation movements successful and some are not? It does seem strange that something that is so unpopular in one city could be overwhelmingly favored in another, perhaps

⁵¹ Exner and Waldbott, *The American Fluoridation Experiment*, 15.

even a neighboring city. The tactics and beliefs behind the people in the city matter. Even more important is local participation. As Lehr and Allen state rather colorfully, “Voters are generally not impressed with high-falootin’ experts who are parachuted into their local contests. It is the local health authorities they want to hear from, people whose opinions they know and trust.”⁵² Based on this theory, people seem to take less advice from the national mediums like the AMA, ADA and USPHS and more from their own dentists and doctors. To win, proponents had to have gained the support of local experts, and broadcast that support to the citizens. Appleton did this, which in part led to the proponent’s success in the city. They released a huge newspaper ad which showed hundreds of local doctors and dentists who were in support of the fluoridation of water.

Even more important though is the local politicians. Support from the local mayor can go a long way, but unfortunately for proponents of fluoride, this is often hard to get. Politicians often refused to take a stand on fluoridation for fear of a loss of support from either side of the campaign. It is not that they did not have an opinion, but instead that they feared retribution. In cases that mayors did choose sides, it is rare that they would take a direct stand against fluoridation, as antifluoridationists were (and still are) often seen as conspiracy theorists, or devoid of scientific knowledge. When a mayor took a pro stance on fluoride, it was accepted in 155 cities and overturned in 103. However, when the local mayor remained neutral, there were 19 adoptions and 219 rejections.⁵³ No evidence could be found of the mayors stance on fluoridation in Appleton during this time, suggesting he was neutral on the subject.

For many profluoridationists, avoiding public debates was key. It is not that they were afraid to argue, but it was that in many cases it was impossible to prove their case. Most debates were

⁵² Freeze and Lehr, *Fluoride Wars*, 65.

⁵³ Crain, Katz, and Rosenthal, *The Politics of Community Conflict*, 47.

short, and most of the proponent's time was spent overturning the information that the opponents just spread, often falsely without proof. Antifluoridationists only had the task of creating doubt, while the profluoridationists had to guarantee safety. According to Michael Easley, "the fact that the debate even took place conveys to the public that a legitimate scientific controversy exists."⁵⁴ Science is exactly the kind of debate that proponents wanted to avoid, as they could never produce statistics that were 100 percent. Cautious people believed that "a 1% chance of cancer may outweigh of 99% chance of reduced cavities."⁵⁵ Opponents often spread that fluoride could cause cancer, and without that 100 percent guarantee of safety, most would rather take cavities.

A regulation by the FCC on airtime of campaigns is currently a major issue. The Cullman doctrine demands equal airtime for both sides of a political debate. Often times, profluoridationist campaigns will spend thousands of dollars on radio or television, and antifluoridationists receive the same amount of air time free of charge, sometimes even paid for by the opposing campaign.⁵⁶ Of course, in the 50s this was not a main issue, as the doctrine was not adopted until 1963. Also, the television was outweighing the radio at this point in time, as it was a new technology and consumerism was on the rise as a way to fight communism. The television set was for entertainment during these years, and news broadcasting had not yet broken into the TV world. So people were not listening to the radio as often, and campaigning had rarely, if at all, spread to television programming. So even if the FCC had placed this regulation at this time, it would not have made much of a significant difference in a campaign.

⁵⁴Easley, M.W. "The New Anti-Fluoridationists: Who Are They and How Do They Operate?" *Journal of Public Health-Dental.*, 45, 240-246, 1985.

⁵⁵ Freeze and Lehr, *Fluoride Wars*, 63.

⁵⁶ Freeze and Lehr, *Fluoride Wars*, 66.

What the FCC does not cover however is newspapers. The freedom of the press allows newspapers to take whichever stance they want on an issue. This is obviously the case in Appleton, as the *Appleton-Post Crescent* worked together closely with *the Committee for the Children*, producing 15 articles in favor of fluoridation. When they came under attack from the Antifluoridation Committee, they produced an article in self defense. The Antifluoridation Committee accused the paper of not only being bias in their articles, but of refusing to put antifluoridationist's letters to the editor in the editorial section. The editor responded by saying he would not put any information in his paper that was not based in fact. In fact there were several antifluoridationist's letters in the editorial section, but only ones that conveyed concern that there was not enough research, and that the side effects of fluoride were not certain. He did not include any (though it is almost certain that he received some) about fluoridation being a communist plot, or that it would lead to cancer. These were theories that were based in fear and not fact, and the editor refused to spread this kind of libel without proof. This almost certainly lead to a bias in the newspaper, and without a regulation, the public was reading all the benefits of fluoridation of water without any of the negatives.⁵⁷ To most Appleton citizens, this must have seemed like the majority of the local population was in support of keeping fluorides in their water supply, and helped persuade them to do so as well.

With all the proof of the benefits of fluoridation, it seems almost impossible that anyone would vote against it. Lehr and Allen believe it is because most voters were confused. They state that in

The National Opinion Research Center Polls taken between 1959 and 1977, 18 to 30% of those polled knew nothing about fluoridation. Of those that claimed they did know

⁵⁷ Fluoridation Scrapbooks, *Appleton Post-Crescent*, 1957.

something about it, 49 to 76% correctly identified the purpose of fluoridation as preventing tooth decay, but 23 to 29% thought its purpose was to purify the water supply.⁵⁸

Although these statistics were two years after the Appleton referendum, it is easy to assume that even in 1957 there was confusion on the part of what fluoride was and its purpose. Technical arguments and scientific facts could easily confuse a person, and the average voter probably felt like they were not qualified to make such a decision. In a place like Appleton where there was so much local support by dentists and doctors, they were able to side with them and make an educated decision. But if that was not present, they might not have known which way to vote, as they would be uncertain of the side effects. Additionally, a citizen who cast a vote against fluoride was most likely voting with caution, as side effects, to them, were uncertain. Some others believed it to be a Russian conspiracy, but by this point most people were shying away from this propaganda and siding with reason.

It is clear why Appleton proponents were successful, even though antifluoridationists used the same tactics that others around the country did. It seems they were just a little bit luckier than later cities, as regulations had not yet been set in place to offer both sides of the argument equally on TV and Radio. Additionally they were given an editor who was not willing to spread propaganda that played on common fears of the time. They had strong leadership and organization in the form of *the Committee for the Children*, whereas the antifluoridationists were saying the same things with lack of proof as had been said for years before them. The profluoridationists were granted support from local officials, who were able to aid the regular citizen in helping them make a decision that they might not have fully understood scientifically. The *Appleton Post-Crescent* was supportive in the editorial section and in the many articles that they published. They gained most of the important

⁵⁸ Freeze and Lehr, *Fluoride Wars*, 62.

sectors of the campaign that they needed to, with the exception of the office of the mayor, although this did not seem to matter. By gaining the support from most of the community structure, they were also able to gain the votes for their side of the campaign.

The Movement Today

It is interesting to note how these arguments transfer into today. Currently, there are still several cities around the United States that still have fluoridation referendums. Remarkably, most of the arguments are the same. Antifluoridationists still argue that the government has too much control, and that they should not mandate fluoride in local communities. They still believe that fluoride is a poison, or at the very least that it contributes to cancer. Profluoridationists, while they still do lose a few, have made great strides and currently about half of all cities within the United States are fluoridated.

Basically the only thing that has changed about the argument is that it is a mind control device utilized by Communists to take over the United States. The people that still believe this are considered in the same group of conspiracy theorists that do not believe the moon landing happened, that deny the Holocaust, and believe the end of the world will come in 2012 in accordance to the Mayan calendar. Playing off of this idea, some even believe now that fluoride is a behavioral control device, one that the Nazi's used in concentration camps during WWII. Jim Keith, author of Mind Control, World Control argues:

We are told by the fanatical ideologists who are advocating the fluoridation of water supplies in this country that their purpose is to reduce tooth decay in children, and it is the plausibility of this excuse, plus the gullibility of the public and the cupidity of the public officials that is responsible for the present spread of artificial water fluoridation in this country...However--- and I want to make this very definite and very positive--- the real reason behind the fluoridation is not to benefit children's teeth. If this were the real reason there are many ways in which it could be done that are much easier, cheaper and far more effective. The

real purpose behind water fluoridation is to reduce the resistance of the masses to domination and control and loss of liberty...⁵⁹

While the majority of citizens faced with this kind of propaganda today disregard it, others accept it freely. Allen Freeze and Jay Lehr comment on how this fear is still held today by some extremists.

They state:

Let's face it. If you believe the mind-control arguments, you qualify as a true-blue, bona fide conspiracy lover. When it comes to this level of paranoia, you either have it or you don't. We have to be honest: We don't. We think the space program really landed on the moon. We don't think the army is hiding aliens in that hanger in Roswell. And we don't think the government is trying to control our minds by putting fluoride in the water.⁶⁰

By pairing mind-control via fluoride treatment with things that seem so ridiculous, these men are outwardly declaring this theory as ludicrous.

In the 1950s, campaigning was limited to basically newspapers, brochures, and going door to door to promote their ideology. What are different today are the mediums that both sides of the argument have to reach the public about their point of view. While televisions were around in the 50s, spreading into homes in every corner of the country, they were typically used simply for entertainment and not for news. Problems arise for campaigns today that did not in the '50s when they use television and radio, as the FCC has placed regulations on campaigning in 1963. Both sides of a political campaign are allowed equal airtime. In Portland, Oregon the profluoridationist camp spends \$25,000 dollars on television commercials. The opponents in Portland demanded, and received equal airtime because of FCC regulations. However, they received most of their airtime for free, and the other 20% (\$4,500) was paid for by the profluoridationists.⁶¹

⁵⁹ Keith, Jim. *Mind Control, World Control* (Illinois: Adventures Unlimited Press, 1997), 71.

⁶⁰ Freeze and Lehr, *Fluoride Wars*, 164.

⁶¹ Freeze and Lehr, *Fluoride Wars*, 66.

Newspapers were the place to advertise in the 1950s. Today however, the internet rules the media world. It is unregulated, and anything goes. When it comes to it, antifuoridationists really use this medium to promote their ideologies. The internet's most popular antifuoridationist movement, The Fluoride Action Network, boasts its 50 reasons to oppose fluoride. On the list are all of the typical arguments mirrored from the 1950s. Number twelve on the list is:

Fluoride is a cumulative poison. On average, only 50% of the fluoride we ingest each day is excreted through the kidneys. The remainder accumulates in our bones, pineal gland, and other tissues. If the kidney is damaged, fluoride accumulation will increase, and with it, the likelihood of harm.

Additionally they cite fluoride build-up in the bones as a cause of not only cancer but also as cause of brain damage and thyroid disease. They even go as far to say that children in China who drink fluoridated water have a decreasing IQ and no change in dental decay.⁶²

Contrary to all of these arguments, Appleton's water supply has stayed fluoridated since its referendum in 1957. That does not mean it has stayed controversy-free, however. As recently as 2007, three medical professionals, Roy Ostenson, Wendy Swartz and Barbara Evenson of Appleton have recommended removing fluoride from the city's water supply. This was in support of a statement made by FAN (Fluoride Action Network) that called for professionals around the world to sign in support of removal of fluoride. Obviously it is still a major political issue, as almost 60 years after its implementation in Appleton it is still being criticized and argued today.

⁶² Fluoride Action Network, "50 Reasons to Oppose Fluoride" <http://www.fluoridealert.org/50-reasons.htm>, Accessed November 13, 2009.

Conclusion

Former Speaker of the House Thomas O'Neil once said, that "all politics is local." In Appleton, this was true during the 1957 referendum on fluoridation. Opponents to fluoridation argued government conspiracy, that fluoride was a slow poison, or that it was a mind control device placed in water by Russians. In Appleton these tactics did not work. They were wary for a lot of reasons, one of them probably being former home-town hero Senator Joe McCarthy making a loud, and very public mess of his career. The study that shows that those who voted in favor of fluoride believed, in most cases, that McCarthy had done more harm than good, suggests that in Appleton McCarthy had dwindled in their eyes, as they had voted for fluoride.

Proponents were successful in the referendum, silencing opponent's arguments. They did this by several means, all of them local. They were able to receive the support of many local medical doctors and dentists, all who ensured its safety and success. Additionally, they were able to enlist the help of the local newspaper, which spread to all corners of Appleton the benefits of having such a program. The Committee for the Children sent out teams by the neighborhood, presumably someone who lived in that neighborhood. By using these tools, they ensured the trust of their community, proving that in this case, their politics were just local.

Just because the referendum ended in success for the proponents, does not mean the argument ended there. The battle between scientific knowledge and mistrust in fluoride still rages, as we see when we look at the community level. While Appleton's water is still fluoridated, not all of its neighbors agree. Wisconsin, which once was a huge battle ground for fluoride, and had the most cases of fluoridated water, still has some communities without it. In the fluoride debate, it seems

that the battle is still local and still going strong, as referendums are still happening and the results of said referendums are mixed. This is one case where in where the debate is local and stays local.

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